

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003516**Date Inspected:** 06-Aug-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1430**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Yan Fei / Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Deck Panel Repairs**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

Bay 3 – New Tower Shop

This QA Inspector randomly observed ZPMC welding and quality control personnel performing inspection, grinding, and Flux Core Arc Welding (FCAW) repairs of Orthotropic Box Girder (OBG) deck panel Partial Joint Penetration (PJP) welds. The deck panels in repair process are designated as: DP379-001, DP162-001, and DP461-001.

In process deck panel repairs appear to be progressing in compliance with Caltrans Engineer Approved Repair Procedure.

The deck panels located in Tower Shop Bay #3 are designated as:

DP433-001, DP379-001, DP216-001, DP162-001, DP459-001, DP460-001,
DP190-001, DP325-001, DP244-001, DP326-001, DP353-001, DP406-001,
DP461-001, DP082-001, DP135-001, DP108-001, DP217-001, DP189-001,
DP326-001, DP245-001, DP407-001, DP191-001, DP325-002.

Visual Testing Before Repair

This QA Inspector performed an initial visual confirmation of the extent of rejectable indications contained in deck panels designated as DP406-001 and DP433-001. This visual confirmation was performed in conjunction

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with ABF representative Kevin Chen and ZPMC representative Sun Yan Fei.

Bay 2-New Tower Shop

This QA Inspector observed ZMPC welding personnel performing carbon arc gouging and grinding, of weld joint starts and stops connecting longitudinal stiffener plates to skin plate East-A. In process work appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector observed continued Shielded Metal Arc Welding (SMAW) multi-pass tack welding and fit-up of longitudinal stiffener plates to skin plates East-B and East-E.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint ESD1-SA296A/E-9A filler passes. The personnel was observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint ESD1-SA80D/E-6B filler passes. The personnel was observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

Bay 1-New Tower Shop

This QA Inspector observed ZMPC welding personnel performing carbon arc gouging and grinding, of weld joint starts and stops connecting longitudinal stiffener plates to skin plate South-A. In process work appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector observed continued Shielded Metal Arc Welding (SMAW) multi-pass tack welding and fit-up of longitudinal stiffener plates to skin plates South-B and South-E.

Tracking and Log Book

This QA Inspector reviewed the contract files and tracking logs for the Magnetic Particle Testing (MT), Ultrasonic Testing (UT), Welding Procedure Specifications (WPS), Procedure Qualification Records (PQR), and QC Inspector records for the deck panel repairs to date.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
